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spring, a mass of the valve, and a mass of the armature, and damping coefficients of the valve opening spring, the armature, and the valve.

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22. (amended) A method for actuating an intake valve disposed in a cylinder head of an internal combustion engine by an electromagnetic valve apparatus having a valve closing electromagnet capable of exhibiting an electromagnetic force for attracting the armature to close the valve, a valve opening electromagnet capable of exhibiting an electromagnetic force for attracting the armature to open the valve, a valve opening spring for biasing the armature in a direction to open the valve, a valve closing spring for biasing the armature in a direction to close the valve, comprising the steps of:

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actuating the valve according to a first mode when a first set of engine operating conditions are detected, said first mode further comprises the steps of de-energizing the valve closing electromagnet; maintaining the valve closing electromagnet in said de-energized state for a first predetermined time enabling the valve to oscillate by force of the valve opening spring and the valve closing spring; and energizing the valve closing electromagnet after said first predetermined time to close the valve; and

actuating the valve according to a second mode when a second set of engine operating conditions are detected, said second mode further comprises the steps of de-energizing the valve closing electromagnet to allow the valve to open, energizing the valve opening electromagnet in response to said de-energizing step to attract the armature to the valve opening electromagnet thereby causing the valve to open; de-energizing the opening electromagnet after a second predetermined time has elapsed since the valve opening electromagnet has been energized; and energizing the valve closing electromagnet in response to said de-energizing step of the valve opening electromagnet to attract the armature to the valve closing electromagnet thereby causing the valve to close.

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#### REMARKS

##### 1. Introduction.

Applicants would like to thank the Examiner for his careful examination of the present application. Applicants have amended claims 7 and 22. Claims 1-32 are presently pending in the application. Applicants submit that no new matter has been